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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,038	11/06/2003	Kouichi Katou	P21-163397M/YS	9362

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EXAMINER

BOSWELL, CHRISTOPHER J

ART UNIT PAPER NUMBER

3676

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/702,038	<b>Applicant(s)</b> KATOU ET AL.	
	<b>Examiner</b> Christopher Boswell	<b>Art Unit</b> 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/4/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 4,781,407 to Rauchhaus, in view of U.S. Patent Number 6,322,282 to Kussman et al.

Rauchhaus discloses the invention substantially as claimed. A lock apparatus for attaching a container member to a support member openably, the lock apparatus having a operation handle (34), a spring (28), which are movably supported by the container member, a pair of slide pins (10 and 11), which are urged in directions of lock holes (figure 1) defined on the support member by the spring and a pair of cam members (19 and 20) to which rear end portions of the slide pins are fitted (column 5, lines 11-22), respectively to urge each slide pin to project and retract, wherein, the operation handle is operated in a swing manner, a front end portion of each slide pin is retracted from each lock hole of the support member against pressure of each spring (column 5, lines 24-33), engagement holes (figures 4 and 5) are defined on opposed surfaces of each front end portion of the cam member having a cylindrical portion. However, Rauchhaus does not disclose the method to which the slide pins are connected to the cam members. Kussman teaches of an adapter (10) having a bifurcated structure made from elastic pieces (43 and 44), where each of the elastic pieces have a protrusion (49) for detachably engaged with an engagement hole in a torque transmission hub (52) in the analogous art of

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torque transmission devices for the purpose of connecting an operated device to an actuator, and to apply both torque and axial force to the operated device, where the adapter can also be rapidly detached from the hub with out tools. It would have been obvious to one with ordinary skill in the art at the time the invention was made to provide a connection means between the slide pins and the cam members by using a bifurcated structure on the end on the slide pins to engage into an engagement hole in the cam member in order to connect the cam members to the slide pins, and to apply both torque and axial force to the slide pins, where the slide pins can also be rapidly detached from the cam members with out tools.

Rauchhaus also discloses the slide pins connected to the cam members to be swingable (column 6, lines 7-21), as in claim 2.

Kussman further teaches a stopper piece (63) provided between the elastic pieces of each slide pin, and an elastic contact piece for contacting with the stopper piece is formed on a surface of each hub member (47, figure 2), and a rib wall (48), where it would have been obvious to one with ordinary skill in the art at the time the invention was made to utilize a stopper piece between the elastic pieces in order to established a additional stiffness to the elastic pieces, as in claims 3 and 4.

Rauchhaus additionally discloses an outer cylindrical member (39) formed on the operation handle, and an O-ring (31 and 32) which contacts with the outer cylindrical member and the cylindrical portion of the cam member simultaneously (figure 4), as in claim 5, wherein the cylindrical portion of the cam member includes a containing groove (33) to which the O-ring is attached, as in claim 6, and wherein the containing groove is formed in a recessed shape (figure 4 and 5) to isolate the O-ring, as in claim 7, as well as the outer cylindrical member has a

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bottom surface, a cam groove (24) is formed on the cylindrical portion of the cam member, and a projected portion (41 and 42) is formed on the outer cylindrical member, the projected portion moves in the cam groove (figures 4 and 5), the projected portion and the cam groove are disposed in a space (5) blocked by the O-ring, as in claim 8 and 9.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to latching assemblies with camming devices:

U.S. Patent Number 6,669,243 to Katoh et al., U.S. Patent Number 6,120,069 to Taranto, U.S. Patent Number 5,688,000 to Dolman, U.S. Patent Number 3,596,952 to Hinkle, U.S. Patent Number 2,088,665 to Pinson.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (703) 305-4067. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Daniel P. Stodola". The signature is fluid and cursive, with the first name "Daniel" being the most prominent part.

CJB *CB*  
October 15, 2004

DANIEL P. STODOLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600